Conference Report

Minarets and microchips: the BMA in Kuala Lumpur

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"Welcome to my kingdom," said the smiling gardener, leaning over the wall of the national mosque. On the very first day Malaysian hospitality proved itself to be outgoing and friendly.

But why Kuala Lumpur? When the venue for the 1987 BMA Congress was announced some British doctors seemed puzzled. Why should a postgraduate clinical meeting be held in a far away country of which they knew little?

We put the question to Dr John Marks, the chairman of council. There were several good reasons, he explained.

Most BMA overseas meetings are held in collaboration with medical associations that were formerly overseas branches of the BMA. Now that—as with the Malaysian Medical Association—they are independent associations in sovereign states the joint meetings help to maintain the old ties and create new ones.

Furthermore, the BMA members who attend these meetings enjoy them—many come year after year. The Kuala Lumpur meeting from 12 to 16 October had 700 doctors and friends from Britain, Hong Kong, India, Australia, and the United States. Overseas meetings are self supporting financially—no cost to the BMA—and because they are big and successful they attract top class speakers.

The Malaysian Minister of Health, Mr Chan Siang Sun, being greeted by (from the left) Dr Alistair Riddell (BMA treasurer), Dr John Havard (BMA secretary), and Dr John Marks (chairman of BMA council) when he arrived to open the congress.

British contributions

Given the difficult task of opening the congress in front of an audience that was half medical and half lay, Sir Christopher Booth, director of the Clinical Research Centre in London, reviewed Britain's contribution to therapeutic advances in the twentieth century. Although Britain had not discovered insulin, the corticosteroids, or important antiprotozoal agents, Sir Christopher believed that the country's clinics, university departments, and pharmaceutical laboratories had made an important contribution to therapeutic advances.

But perhaps the most important contribution had been the development of the controlled clinical trial. In response to a request by the Association of British Chemical Manufacturers the Medical Research Council had set up a therapeutic trials committee in 1931.

After the war came the randomised controlled trial, the first of which had been organised by Sir Austen Bradford Hill into the use of streptomycin compared with bed rest in young adults with rapidly advancing pulmonary tuberculosis which was unsuitable for traditional treatment. These, Sir Christopher said, had provided a model that had been followed assiduously ever since.

The concept of renewing and strengthening ties was taken up right at the start of the congress by the Malaysian Minister of Health, Mr Chan Siang Sun, when he declared the meeting open.

In an unusual plea from a government minister he urged the profession to reconsider its role and the public's expectation of doctors. There should be a move away from a disease centred practice to a more community based one. The rising costs of health caused by improved technology and increased demand should concern everyone; in 1984 there had been a study of health care finance in Malaya and there was, the minister said, to be a feasibility study into social security.

Death and drugs

Western newspapers have made headline stories of the Malaysian policy of mandatory capital punishment for anyone found in possession of more than minimal quantities of opiates or cannabis. The thinking behind the policy was explained by Professor Abdul Aziz Abdullah (head of the psychiatric department at Kuala Lumpur General Hospital) at the plenary session on drug dependence, chaired by Dr John Marks.

Addiction to opium in Malaya dated back to the early nineteenth century, said Professor Aziz. At that time the British, as colonial power, had welcomed the opium trade. As late as the first half of the twentieth century opium dens were licensed by the government; but after the end of the second world war they had been made illegal. In the 1960s the abuse of narcotic drugs had spread into the younger generations of Malaysians—encouraged by easy access to the drugs owing to the country's close proximity to the infamous golden triangle of Thailand, Burma, and Laos.

The mandatory death penalty for drug traffickers was introduced in 1983 as part of an all out government campaign. This included the establishment of detoxification and rehabilitation centres, education campaigns in schools and workplaces, and encouragement of participation by parents in neighbourhood schemes. The campaign had reduced the numbers of known addicts from about 14 000 to half that number, but Professor Aziz saw no likelihood of the eradication of drug addiction.

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Presenting a Western viewpoint, Professor S A Jenner (Sheffield) argued the case for the decriminalisation of narcotics. His experience in a city with 17% unemployment had convinced him that addiction was a social rather than a medical problem. After many years of ineffective treatment based on methadone maintenance the Sheffield system was now based on social rather than medical support for addicts. After four days' detoxification they were introduced to social rehabilitation units, which led those who were compliant to fresh opportunities for education and employment.

Eradicating "dadah"

Later we had an opportunity to see how the Malayan government was tackling rehabilitation first hand. There are two words for drugs—"madat" for those legally prescribed by doctors to treat people and "dadah" for drugs taken for illicit purposes—and government propaganda aims to make "dadah" such a term of revulsion that its use will be discouraged. The three pronged attack has been to reduce supply, to reduce demand, and to treat and rehabilitate addicts.

Rehabilitation centres are scattered throughout Malaya—Kem Pemadam is 15 km from Kuala Lumpur and houses 50 to 60 men with three staff in simple huts on the site of a disused tin mine. Pemadam means to extinguish, and the men, who range in age from 16 to 50, are taken to this halfway house after a period in hospital or a detoxification centre. They stay for at least six months and follow a fairly strict regimen of work, exercise, and drill. They can stay for one or even two years and work in a fish farm or a market garden or do simple welding and repair jobs.

> One reason why Chinese people with diabetes may not comply with treatment is their fatalistic philosophy. They believe that each person's life span is preordained and that there is no point in attempting to influence it.

The men undergo random urine tests, and if discovered with drugs or alcohol they are dismissed immediately. The director, Dr H J Kamaruddin, said that the short term success rate was 70%, dropping to 30% at long term follow up.

Prostaglandins: divided views

The second plenary session, chaired by Sir Christopher Booth, looked at prostaglandins. This group of natural compounds had been described as "the drugs of the future" for at least 25 years, said Dr B G Gazzard (London). He described his own research experience with prostaglandins in the treatment of patients with peptic ulcer. In theory prostaglandins should augment several of the stomach's natural defences against ulceration since they increased the production of mucus and bicarbonate, speeded cell turnover and blood flow, and reduced the secretion of acid. In practice, however, prostaglandins were of therapeutic value only when given in doses sufficient to inhibit acid production—something achieved already by H_2 receptor antagonists. So while conceptually exciting they had yet to fulfil their promise in gastroenterology.

A rather more favourable verdict came from Dr M J Weston (Chelmsford). As a nephrologist he was concerned with the many disorders that could produce a consumption coagulopathy and so acute renal failure or a microangiopathic haemolytic anaemia. The underlying cause might be systemic lupus, verotoxins from *Escherichia coli*, or acute transplant rejection; the end result was blockage of small vessels from platelet activation and fibrin deposition. Preliminary results suggested that treatment with intravenous prostacyclin could be dramatically effective in at least some patients with these conditions.

Osteoarthritis not a boring subject

Contrary to popular belief osteoarthritis was not the most boring subject in the world; it was important and fascinating, said Professor Paul Dieppe (Bristol), who opened the third plenary session, chaired by Dr R A Keable-Elliott. Reminding us that it was a condition—not a disease—that caused 4·7 million lost working days a year in Britain, Professor Dieppe went on to describe the effect of age, genes, and systemic associations that led to loss of articular cartilage.

> One bunch of cars parked in the grounds of the Sungai Buloh leprosarium seemed remarkably opulent. They did not, it turned out, belong to the doctors but to the wealthy Chinese who had driven many miles to consult one of the long term inpatients who was a famed fortune teller.

The natural history of the condition was unknown, and there was no evidence that it got progressively worse; indeed, about 5% of patients improved spontaneously without treatment. Cures had moved on from the traditional spa treatment of the middle ages to drugs, mechanical aids, and surgery to ease the pain, reduce the disability, and correct the joint deterioration. A walking stick was probably the single most effective aid, in Professor Dieppe's view, to help those who found it difficult to walk, and, though it was not known how the procedure worked, physiotherapists often relieved pain by working on the muscles.

Turning to drug treatment, he advised that non-steroidal anti-inflammatory drugs were often more effective than pure analgesics. Intra-articular steroids were beneficial in the short term. There was some evidence, however, that these agents accelerated the progress of the condition; if they did not give immediate pain relief they should be used cautiously.

One problem in treating osteoarthritis in the East, explained Professor Abdul Hamid, an orthopaedic surgeon in Malaysia, was that so many people presented late. Malaysians were fatalistic about entering hospital—they thought that it would be their last journey—and about submitting to surgery. In more than 60% of those seeking treatment the injuries were caused by road traffic accidents and 70% of the victims were below the age of 40. He agreed with other speakers about the influence of genetics—very few Chinese developed osteoarthritis when compared with the Indians and the Malays.

Current thinking on bowel cancer

A plenary session on bowel cancer, chaired by Mr David Bolt, was opened by Professor Dilip Raj (Malaysia), who reviewed three series of patients treated in different parts of Malaysia. These showed that colorectal carcinoma in Asia was similar to the disease in Western countries—the same distribution within the bowel, the same histological types, and so on. For reasons unknown, however, bowel cancer seemed commoner in the Chinese than in Malays or Indians.

Mr James Kyle (Aberdeen) discussed causation. Scotland had the highest incidence of bowel cancer in the world—possibly because of its high latitude since vitamin D seemed to have a protective effect. But at present our understanding of carcinogenesis was fragmentary. Possibly as many as a dozen factors might be relevant, including a substantial genetic contribution, environmental factors—including smoking and urban rather than rural residence—and diet. Fibre seemed to be protective, as did selenium, green vegetables, lentils, and tomatoes; but no one really knew the relevance of food additives and preservatives. Patients who had had a gastrectomy for gastric ulcer or a mastectomy for breast cancer were at increased risk. Confusing as the picture seemed, however, it might become clearer with recent advances in our understanding of oncogenes.

Mr James Thomson (London) went into greater detail about those conditions known to predispose to bowel cancer—familial

polyposis coli, patients with benign disease, those with inflammatory bowel disease, and those with ureterocolic anastomosis. Patients with benign growths needed full assessment of whole colon, all the lesions should be removed, and lifelong follow up was required. Those with familial polyposis coli needed to be identified as early as possible; left untreated all would eventually develop carcinoma.

Women in medicine

Do you need to be aggressive to succeed as a woman in medicine? The participants at the teach in on the role of women in medicine seemed to think so. It also helped to be determined to succeed, to be encouraged by your seniors, and to have sufficient money even when a junior doctor to provide adequate help for home and family.

After Dr Shirley Nathan had set the scene by explaining the struggle that women had had to attain equality as doctors Dr Jo Gazzard (London) suggested that women faced too many conflicts to be highfliers. They faced a competitive atmosphere at work; there was almost a fear of success, with competence struggling with femininity; and they were still expected to maintain the traditional female role at home. Statistics would not improve until it became culturally acceptable for husbands to take on an equal share of responsibility for housework and child care.

Dr John Marks thought that women's problems, views, and special needs would go unheeded until a woman became chairman of the council of the BMA, president of the Royal College of Surgeons, and president of the Royal College of Physicians.

There was little support for special women's groups or for women to vote for women in professional organisations—women should be recognised as doctors, Dr Nathan emphasised.

Three delegates at one of the receptions deciding where to go in Kuala Lumpur.

A medical student from Bristol, Miss Catherine Payne, where 70% of entrants were women, said that there was a feeling that women should not go into surgery, and they seemed to be actively discouraged by their seniors. But the BMA's president, Mr David Bolt, rejected this view, and said that he gave every encouragement to women to progress. Only one, however, had become a senior registrar. It was not that so many men were against women; the women just did not try.

Although part time training and part time posts were suitable for married women and should be available that was not the way to the top. As the number of registrars dropped with the latest manpower proposals in *Hospital Medical Staffing: Achieving a Balance*, said Mr A P J Ross (Winchester), the competition would become stiffer with fewer opportunities for part time training.

Miss Ann Boutwood (London), spoke of the USSR, where in 1984 there had been nearly one million doctors, of whom 70% were women. But few reached high grades, and they earned less than the national average wage. In 1983 in the United States 30% of medical school entrants were women, and this was predicted to reach 40% in 1990.

> Obesity seems to be losing status as an underlying cause of disease; during the course of the congress delegates were told that being overweight was probably less important than had been thought in the pathogenesis of both osteoarthritis and type II diabetes.

In Malaysia, explained Dr Wong Hee Ong, former professor of medicine, University of Malaysia, 30% of doctors were women. Others had talked about developed countries, but Malaya was underdeveloped, with 60% of the population in rural areas, many parts of which had no clean water supply and no proper sanitation. The literacy rate (1984) was 70% for men and less than 60% for women. She thought that the discussion should not be confined to doctors. Though it was important to increase the number of women doctors to improve the national average of one for 6000 of the population, an increase was needed among other health workers—for example, midwives.

Doubts and hopes on diabetes

The plenary session on diabetes mellitus, chaired by Dr B L Alexander, was opened by Dr David Pyke (London), who reviewed recent advances in knowledge and in management, concluding that the most important had been the clear evidence that the two types of diabetes were different diseases. By contrast, the breakthroughs claimed in therapy were less convincing. Human insulin offered patients no clear advantages. Continuous subcutaneous insulin infusion using a battery powered pump certainly produced more physiological control of the blood glucose: but whether or not it would reduce the long term incidence of microvascular complications remained far from clear—it was too early to say. Continuous infusion might arrest the early stages of kidney disease.

Dr Pyke was equally dismissive of pancreatic transplants. Since any patient given a transplant would need continuous treatment with immunosuppressive drugs he believed transplanting the pancreas could be justified only in patients who already needed a kidney transplant. No controlled trial had been established—probably because the surgeons and the patients concerned seemed to be enthusiasts.

Professor Mustapha Embong (Malaysia) reviewed data on the estimated 300 000 diabetics in Malaysia. Just over 80% of those on treatment were being given oral hypoglycaemic drugs. In one survey up to 80% of those patients were being given metformin (possibly because of the high frequency of obesity and poor dietary compliance in Malaysian patients). Doctors in Malaysia rarely prescribed generic medicines (which were imported and of doubtful reliability) and tended to use the new sulphonylureas rather than the older ones.

Undernutrition

The chairman of the session on undernutrition, Sir Douglas Black, forecast a revival of interest in nutrition, with a great understanding of the importance of nutrient factors in disease.

The opening speaker, Professor Alan Jackson (Southampton), agreed. He suggested three components to the future of human nutrition. Firstly, nutrition had a place in the specific management of certain disorders. But the difficulty of putting together 47 different nutrients in various combinations was beyond the interest of most doctors so the people with the necessary skill to do this were required. Secondly, genetic expression could be influenced by manipulating the diet, and in the 1990s molecular biologists and

nutritionists would work more closely together. Finally, and most importantly, nutrition dealt with the whole body so nutritionists would provide the conceptual framework to help tidy up some of medicine's loose ends.

Professor Chen Siew Tin (Malaysia) blamed malnutrition in children in rural Malaysia on low income, frequent pregnancies, and a deficient diet combined with poor sanitation and worm infection. These all set up a vicious circle of lowered resistance and severe infection. The infant mortality rate was still 17 per 1000 population in Malaysia, though the life expectancy at birth had increased from 54 in 1960 to 68 in 1985. Protein energy malnutrition was most common; marasmus and kwashiorkor were seen rarely. Professor Chen showed that children in rural areas and among low income Malay and Chinese families were shorter and lighter than those in urban areas and from privileged British or Malay backgrounds.

Tropical medicine

The final scientific session was held jointly with the 21st Malaysia-Singapore Congress of Medicine and was on tropical medicine.

The most important tropical disease is still malaria, with half of the world's population exposed to infection and two million deaths occurring a year. Two speakers, Dr Graham Brown (Australia) and Dr V Thomas (Malaysia), talked about recent progress towards an effective vaccine.

Understanding of the natural course of the disease was essential to an understanding of any vaccine project, they explained. In regions where malaria was endemic children became infected in their first two years of life (and the peak mortality occurred at this age). As the children grew older they would have recurrences of malaria, but the symptoms became less severe. By early adult life the pattern had become one of recurrent parasitaemia with few if any symptoms.

If, however, a healthy adult was given treatment for his parasitaemia—or if he travelled to a malaria free country—the immunity would wane, and within two years he would once again be susceptible to symptomatic malaria.

So what could a vaccine do? The hope was that it might prevent deaths in young children and give immunity to adults that would be boosted by natural infection. Vaccination might also, eventually, become the most effective prophylaxis for travellers from non-endemic countries.

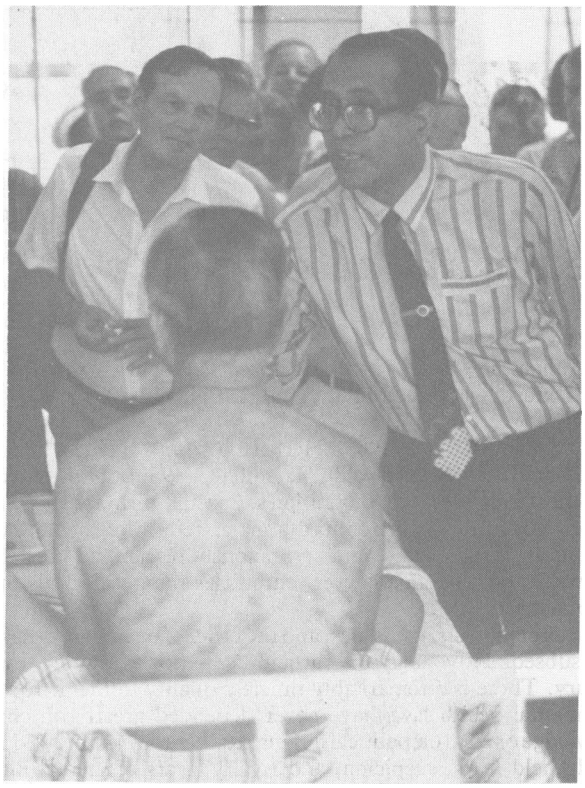
Research faced many obstacles. In theory vaccines could be prepared against the sporozoites, the blood stages, and sexual stages of the plasmodia; in practice an effective vaccine would probably include antigens from all three stages. Already a genetically engineered vaccine using a sporozoite antigen had been shown to give some protection—but more work was needed.

Even assuming that the optimum mixture of antigens could be developed the delivery of the vaccine would present problems; the use of vaccinia virus as a carrier (as is done with some of the hepatitis B vaccines) had probably been ruled out by its devastating effects on people infected with the human immunodeficiency virus.

The drug Lamprene, used in the treatment of Hansen's disease, is unacceptable to most patients in Malaysia because it darkens the skin—and the prejudice against leprosy is such that patients cannot explain what is happening to their friends.

NUTRITION AND DISEASE

Most populations exposed to tropical diseases were also poorly nourished, said Professor Alan Jackson (Southampton), and a tripartite equilibrium developed between genetic, nutritional, and infective factors. Nutritional deficiencies, especially of vitamin A, increased susceptibility to some diseases—such as measles and rotavirus infection (an important cause of diarrhoea) but it gave some measure of protection against some other parasitic infections.



Visitors from the congress being shown the Sungai Buloh leprosy centre.

Restoring adequate nutrition could cure—for example, ascariasis—or make things worse.

Professor Tikki Pang described new techniques for diagnosing dengue being developed in his laboratory at the University of Malaysia. Early diagnosis would be extremely helpful to clinicians faced with a patient with a possible viral haemorrhagic fever. The ELISA test they had developed for early detection of IgM gave a result within 24 hours. A newer test using DNA hybridisation to detect viral DNA was still under development.

FILARIASIS AND LEPROSY

Dr Mak Joon Wah (Malaysia) described some recent advances in our understanding of filariasis, which in Malaysia could be due to *Wucheria bancrofti*, *Brugia malayi*, or *B pahangi*. Research into the parasites' biochemistry had opened up new avenues of treatment, while again the use of recombinant DNA techniques promised to provide reliable means for early accurate diagnosis.

Finally, Dr K J Lim (Malaysia) gave delegates an entertaining account of the state of play in Hansen's disease. Probably the only feature of the disease known for certain was that it was due to *Mycobacterium leprae*. The mode of transmission and the optimum treatment remained debatable. Nevertheless, the disease could be better controlled if doctors and patients would apply the principles of early case finding, surveillance of contacts, and compliance with treatment.

Hospital visits

Congress delegates were offered tours of several hospitals including a local aborigine hospital and a leprosarium. This, the Sungai Buloh Hospital and Leprosy Control Centre, had a long record of collaboration in research with the National Institute for Medical Research in Britain. However, few patients (other than those from former years who had become institutionalised) were treated at the unit, which now served as a referral centre for patients with refractory or complicated disease and those in need of specialist rehabilitation.